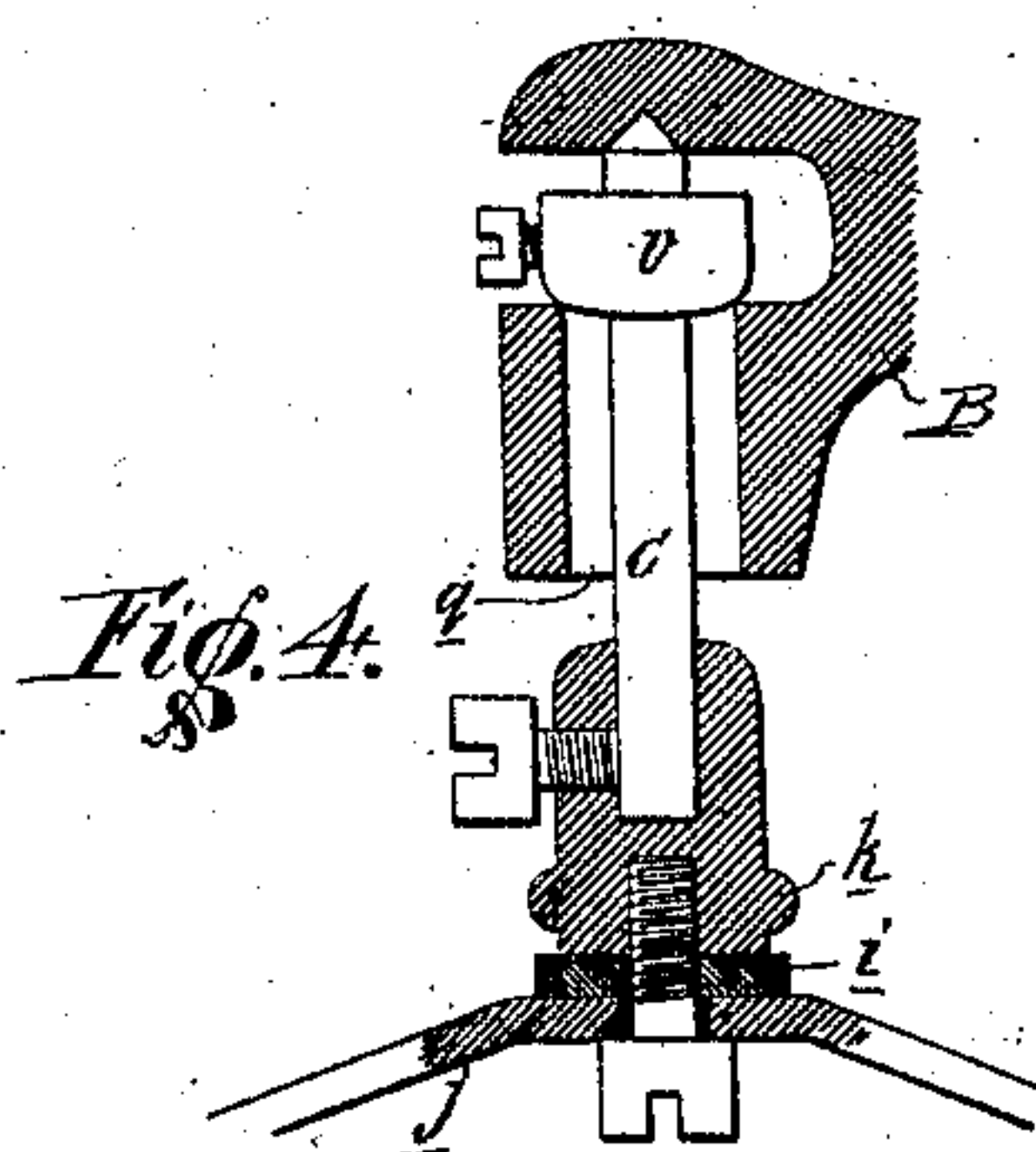
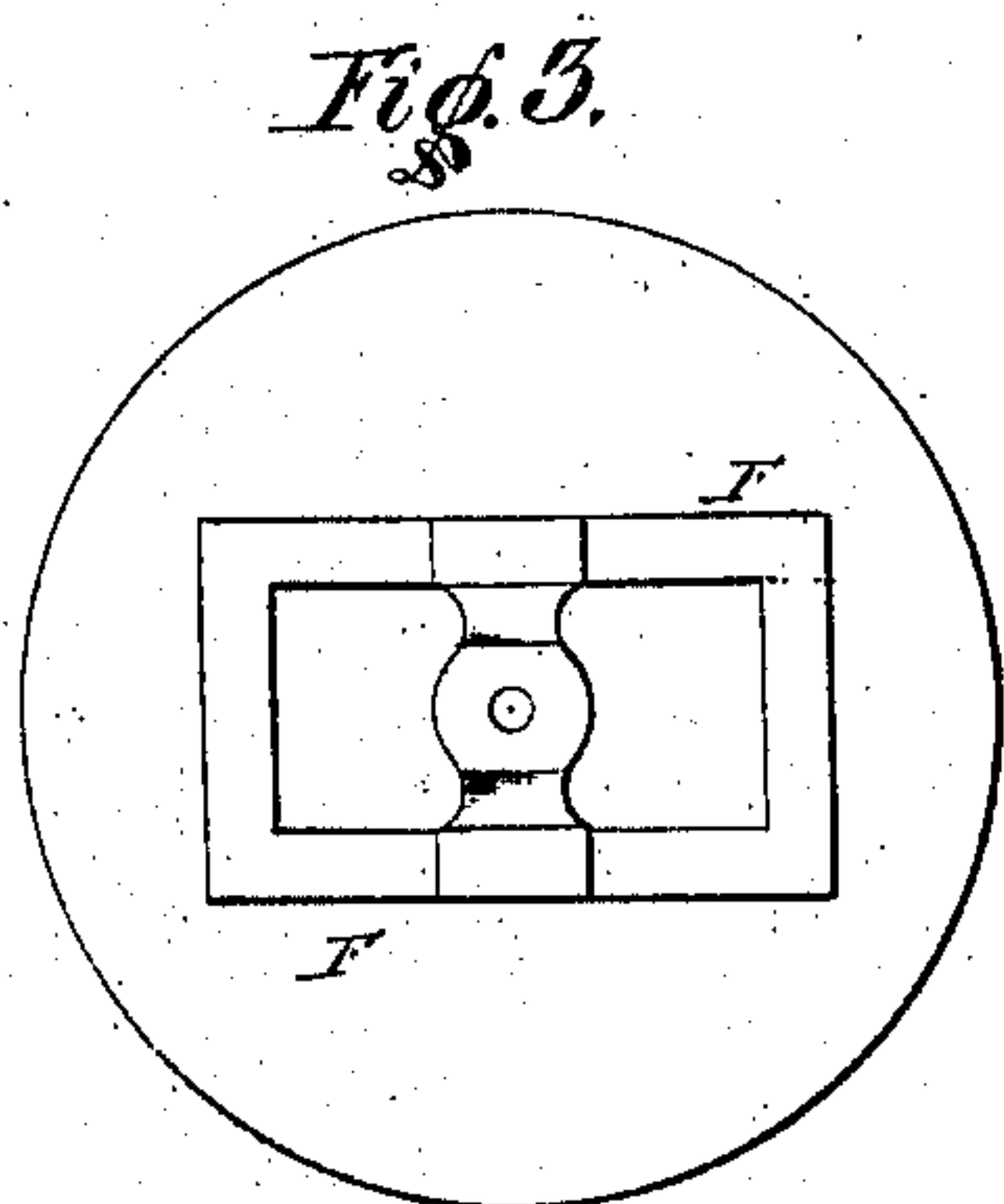
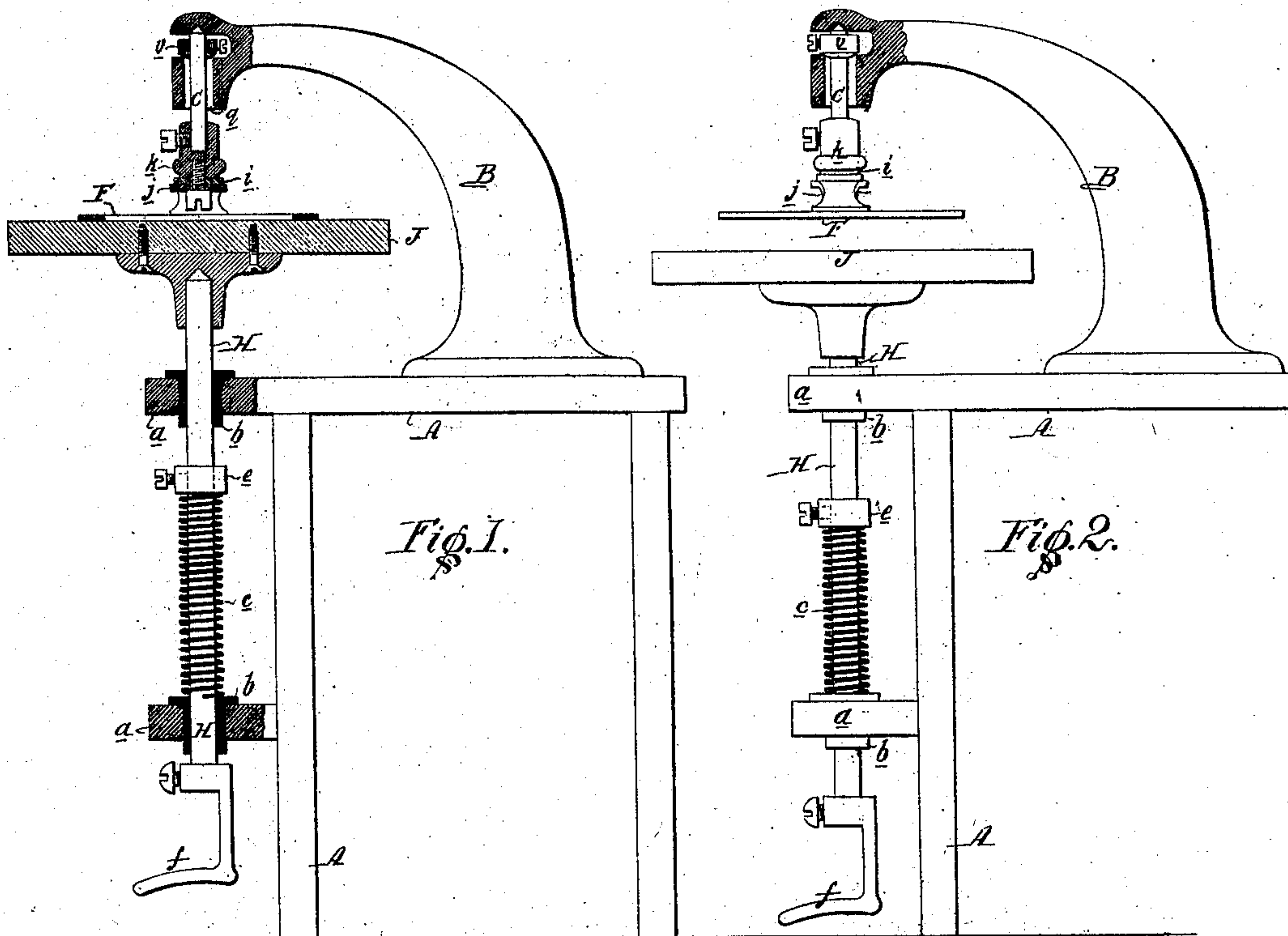


T. M. Saurman ,
Photograph Print Cutter.
No. 106,080. Patented Aug. 2. 1870.



Witnesses { *A. Steel.*
John Parker

Thomas M. Saurman
By his attys.
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United States Patent Office.

THOMAS MARTIN SAURMAN, OF NORRISTOWN, PENNSYLVANIA.

Letters Patent No. 106,080, dated August 2, 1870.

IMPROVEMENT IN PHOTOGRAPHIC PRINT-CUTTING APPARATUS.

The Schedule referred to in these Letters Patent and making part of the same

I, THOMAS MARTIN SAURMAN, of Norristown, county of Montgomery, State of Pennsylvania, have invented an Improved Photographic Print-cutting Apparatus, of which the following is a specification.

Nature and Object of the Invention.

My invention consists, mainly, in the combination of a revolving table, capable of moving vertically, with a forming-plate, supported by a fixed arm or frame, as fully described hereafter.

The print is clamped between the table and the forming-plate, and trimmed to the shape of the latter as the table is revolved, and the table is lowered by means of a treadle, in order to release the print, when the operation is completed.

Description of the Accompanying Drawing.

Figure 1 is a side elevation of my improved photographic print-cutting apparatus;

Figure 2, a sectional view of the same;

Figure 3, a plan view of the revolving table and former; and

Figure 4, an enlarged sectional view of the upper portion of the apparatus.

General Description.

A represents any suitable stand or table, to the top of which is fixed an arm or frame, B, the latter supporting, at its outer end, a vertical rod or spindle, C, to which the forming-plate F is secured.

The stand A has also two projections or brackets, *a*, provided with bushes or bearings, *b*, through which passes a vertical rod, H, which is directly beneath or in line with the spindle C.

To the upper end of this rod H is hung, in such a manner that it can be readily rotated, a table, J, which is constantly forced up to and held against the forming-plate F by a spring, *c*, wound upon the rod, and bearing against its collar *e*, and against one of the bushes *b*.

The revolving table can be depressed, so as to withdraw it from the forming-plate, by means of an arm or treadle, *f*, at the lower extremity of the rod H.

If the spindle C merely revolved in the arm A, and had no lateral motion whatever, very accurate fitting and adjusting of the parts would be required to bring the said spindle directly over the rod H, so that, when the revolving table was in contact with the forming-plate, the latter might lie flatly and squarely upon the same.

In order to avoid the expense of this extremely accurate fitting, I have so arranged the forming-plate that it may yield, and adapt itself to the revolving table.

This I have accomplished by, in the first place, permitting the spindle to swing or oscillate, to a limited extent, from its bearings in the fixed arm; and, secondly, by intervening a gum, leather, or other washer, *i*, between the yoke *j*, to which the forming-plate is secured, and the lower end of the spindle or block *k*, secured to the same, (see fig. 4.)

The desired oscillating motion is imparted to the spindle by enlarging the diameter of the opening *g*, in the arm through which the said spindle passes, and the latter is furnished with a retaining-collar, *v*, to prevent its withdrawal from the arm when the revolving table is lowered.

The operation of the above apparatus is extremely simple. The revolving table is first lowered, by means of the treadle, so as to withdraw it from the forming-plate, when the photographic print or picture to be trimmed is placed upon the said table, the treadle being then released, when, by the action of the spring *c*, the table will be caused to rise, thus firmly clamping the print between the same and the forming-plate.

The edges of the print, which project beyond the form, are then trimmed off by a suitable cutter or knife, as the table is revolved, and, when the operation is completed, the table is depressed by means of the treadle, the print removed and replaced by a second, which is treated in a similar manner.

The forming-plate may be square, round, oval, or of any other desired shape. It may be made of metal, glass, or other suitable material, and can be secured to the yoke *j* by rivets, clamps, or other appropriate fastenings.

A principal advantage which my invention has over others of its class is that the print, while being trimmed, is clamped between the bed and form, and thus securely held by the action of a spring, so that there can be no danger of slipping, as when the pressure is exerted by the foot of the operator acting upon a treadle.

Claims.

1. The combination, substantially as herein described, of a revolving table, capable of moving vertically, with a former, supported by a fixed arm or frame.
2. The sliding rod H, for the support of the revolving table, maintained in an elevated position by a suitable spring, and arranged to be depressed by a treadle, or its equivalent, as specified.
3. The former F, of metal, glass, or other suitable material, secured to a spindle, C, hung to and arranged to revolve in the fixed arm or frame B.
4. The said spindle C, hung to the fixed arm, substantially in the manner described, so that it may oscillate as well as revolve in the said arm.
5. The washer *i*, intervening between the yoke *j*, to which the former is secured, and the lower end of the spindle or block attached to the same.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

THOMAS MARTIN SAURMAN.

Witnesses:

LOUIS BOSWELL,
WM. A. STEEL.